HW#51: Composition of Functions @ Integer

Geometry

Due Date: Tuesday, January 8th, 2013

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

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| 1. Let f(x) = 2x- 1 and g(x) = .  Find f(g(16)). | 2. Let w(x) = and r(x) =  Find (wr)(4). | 3. f(x) = 2 + 4, g(x) = 3x- 3. Find f(g(-2)). |
| 4. f(x)= 3 + 2x -1, g(x) = 2x - 4 Find f g(3). | 5. Let w(x) = . Find  ww(-4). | 6. Let j(x) = . Find j(j(3)). |
| 7. Let f(x) = 2x + 5 and g(x) = x-8.  a) Find f(g(3))  b) g(f(3)) | 8. Let p(x) = and r(x) = .  a) Find (pr)(4)  b) (rp)(4) – *Leave in radical form!* | 9. Let f(x) = 3x + 2 and g(x) = x+ 2.  a) Find f(g(-2))  b) g(f(-2)) |

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| --- | --- |
| 10. Factor: | 11. Find the sum of the solutions to the equation: |
| 12. A ball is kicked upward. It is h feet above the ground t seconds after it is kicked. The relationship between h and t is given by the equation .  a. What is the max height of the ball?  b. How many feet above the ground is the ball 2 seconds after it is kicked? | |
| 14. For what value of x, if any, is the equation | 15. Find the solutions to the equation: |

HW#52: Composition of Functions as Expressions

Geometry

Due Date: Wednesday, January 9th, 2013

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

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| 1. Let e(x)= and  y(x)= . Find (ey)(2). | 2. Let f(x) = 5x – x and  g(x) = x + 8. Find g(f(-2)). | | 3. Let f(x) = 2x – 6 and  g(x) = x+ 8.  a) Find g(f(-3))  b) f(g(-3)). |
| 4. a. If g(x) = 2x – 5 and f(x) = x2 + 1, compute  fg(x).  b. If g(x) = 2x – 5 and f(x) = x2 + 1, compute  g f(x).  c. If g(x) = 2x – 5 and f(x) = x2 + 1, compute  g f(-3).  d. If g(x) = 2x – 5 and f(x) = x2 + 1, compute  g g(x). | | 5. a. Compute g(f(x)) if g(x) = 4x -2 and  f(x) = 3x + 4.  b. Compute f(g(x)) if g(x) = 4x -2 and  f(x) = 3x + 4.  c. Compute f(f(-4)) if f(x) = 3x + 4.  d. Compute g(f(x)) if g(x) = x2 -2x + 6 and  f(x) = 3x + 4. *This one is tricky! PUSH IT!!* | |
| 6.a. Factor:  b. Find the sum of the solutions to the equation: | | | |
| 7. a. Factor: (3x+5)(x-3)  b. Factor: (4x-5)(6x-7) | | 8. What is the value of  when x= 4 ? | |

HW#53: Undefined Rational Expressions

Geometry

Due Date: Thursday, January 10th, 2013

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

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| 1) Find the value(s) of x that make the following expressions undefined. | 3) State the x-value for which the graph below is undefined:  http://www.math-prof.com/Alg2/Ch21_04.jpg |
| 2) Find the value(s) of x that make the following expressions undefined. |
| 4) What is the sum of the values that make the expression below undefined: | 5) What value(s) makes the expression undefined? |
| 6) When the expression is undefined, what is the value of ? | 7) When the expression is undefined, what is the value of ? |
| 8) Let k(x) = x - 10 and j(x) = .  a. Find j(k(x)).  b. Find k(k(x)). | 9) Let f(x) =  and g(x) = x + 9.  a. Find g f(x).  b. Find f g(x). |
| 10. For what value of k is x=4 a solution to ? | 11.For what value of p is x=3 a solution to |
| 12. What is the product of 3x-1 and 3x+1 ? | 13. What is the product of 2x+3 and 4x-2 ? |
| 14. Simplify  in factored form. | 15. When x=-3 and y=2, what is the value of ? |

HW#54: Undefined Radical Expressions

Geometry

Due Date: Friday, January 11th, 2013

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

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| --- | --- | --- |
| 1) What value(s) make the expression undefined? | | 2) When the expression is undefined, what is the value of ? |
| 3) What value(s) make the expression below undefined? | | 4) What is the sum of the values that make the expression below undefined: |
| 5) The expression undefined for what values of x? (Write as an inequality and graph) | 7) What is the undefined x-value in the graph below?  http://apcalckellyanderika.wikispaces.com/file/view/vert_asy.gif/206449186/vert_asy.gif | |
| 6) The expression is undefined for what values of x? (Write as an inequality and graph) |
| 8) When is the following expression undefined? | | 9) When is the following expression undefined? |
| 10) What is the product of 2x+5 and 3x-6 ? | | 11) What is the sum of the solutions to the expression: ? |
| 12) If x(x+3)=0, what are the solution(s) for x? | | 13) If x(x-3)=0, what are the solutions for x? |
| 14) If x=3, what is ? | | 15) A projectile that is launched is given by the equation . According to the projectile motion model, the projectile hits the ground when t = ? |

HW#55: Week 18 Review

Geometry

Due Date: Monday, January 14th, 2013

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

|  |  |  |
| --- | --- | --- |
| 1) What value(s) make the expression undefined? | | 2) When the expression  is undefined, what is the value of ? |
| 3) What is the sum of the values that make the expression below undefined? | | 4) If f(x) = 2x – 5 and g(x) = x2 – 8, evaluate g(f(x)). |
| 5) The expression undefined for what values of x? (Write as an inequality and graph) | 7) What is the undefined x-value in the graph below?  http://www.mesacc.edu/~marfv02121/readings/rational/rational2.GIF | |
| 6) The expression is undefined for what values of x? (Write as an inequality and graph) |
| 8) If h(x) = -2x – 3 and j(x) = x2 + 0.5, evaluate:  a) j(h(x)) | | b) h j(-3). |
| 9) Factor: | | 10) What is the sum of the solutions to the expression ? |
| 11) For what value of x, if any, is the equation ? | | 12) Find the solutions to the following equation:  x(x-8)=0 |
| 13) What is (3x+3)(x-2) equivalent to after using FOIL? | | 14) What is the product of 3x-2 and 4x+6? |
| 15) What is the product of 6x-7 and 8x+2? | | 16) Find the solutions to the following equation: |